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A Note on the Analysis of Female Headed Households in Developing Countries

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Abstract

In this paper, we will attempt to clarify some issues commonly found in recent discussions surrounding female headship analysis, in general, and will also discuss recent literature on the relationship between female headship and poverty, in particular. The issues addressed here include: the confusion between female headship analysis and gender analysis of poverty; the existence of alternative definitions of household headship; and the existence of different analytical purposes of using the concept of household headship and the need for using appropriate headship definitions for each purpose.

I. Introduction

While policy discussion regarding female headed households (FHHs) is not new, it is still a controversial issue. As household-level data sets became increasingly available in many developing countries validity of some of the empirical regularities earlier claimed, such as the higher poverty (measured, for example, by consumption expenditures) among FHHs, have been somewhat questioned (e.g., [24], [20]), conventional definitions of 'household headship' have been criticized (e.g., [26]) and policy implications have been debated (e.g., [6], [4]). In fact, analysis of FHHs has been used for different purposes and different definitions of 'household head' have been proposed. In this paper, we will attempt to clarify some issues commonly found, sometimes implicitly, in recent discussions surrounding female headship analysis, in general, and will also discuss recent literature on the relationship between female headship and poverty, in particular. The issues that we try to address here are: the confusion between female headship analysis and gender analysis of poverty; the existence of alternative definitions of household headship; and the existence of different analytical purposes of using the concept of household headship and the need for using appropriate headship definitions for each purpose. Finally, we will

discuss recent empirical findings on the poverty of FHHs in the literature.

II. Alternative Definitions of Female Headed Households

'Gender and Poverty' Questions versus Female Headship Analysis

In recent years, the relationships between 'gender and poverty' have drawn increasing attention in policy discussions. Questions have been frequently asked, such as: 'do women constitute a greater share of the poor than men?' or 'are girls discriminated against boys within poor households?' Such questions focus on the level of individual members within the household and thus usually require individual-level information, particularly, information on intra-household resource allocation. One difficulty in pursuing fully these sets of questions is relative paucity of data that make fully systematic analysis possible.¹⁾ We should clearly note here, however, that a more traditional focus on FHHs is quite different from such 'gender and poverty' questions. Female headship analysis primarily focuses on the household-level, rather than individual-level, questions; obviously, there are both men and women within both female headed and male headed households that are poor. Thus, the identification of poor female headed *households* cannot be used as a

proxy for the identification of poor *women*. While the poverty of women *and men* living in female headed *households* can often be related to disadvantages and vulnerability of female household heads, a focus on FHHs may not necessarily shed light on poor *women* (or men, for that matter) living in male headed households. In other words, 'gender and poverty' questions draw attention to possible *intra*-household inequality while 'headship' analysis is mainly concerned about differences *among* different types of *households*. Thus, headship analysis should *not* be seen as a proxy for gender analysis of poverty per se. (e.g., see also [24])

Alternative Definitions of Household Headship

1. Demographic and economic aspects of household headship

One well-known problem with the headship analysis is the fact that the typical survey definition of household headship (i.e., self reported headship without any clear *a priori* definition) was created for the needs of survey implementation, and not for any analytical purposes to be discussed below. That is to say, the main purpose of the typical survey definition of headship is to account for all the household members and to avoid double counting during survey interviews, by assigning a reference person — the 'household head' — against whom all the relationships among household members are identified (e.g., [4] [26]). However, apart from such original need arising from survey administration, we can identify several different, though related, *analytical* uses of the concept of household headship commonly found in literature. While the typical survey definition of the female headship, i.e., the 'self-reported' headship, would do well for the survey need for the headship (since it is what the self-reported headship is intended for), problems could arise when such definition of the headship is taken and applied for analytical purposes. Generally, different *uses* of the concept of household headship would require different *definitions* of the headship altogether. In order to clarify this point, in this sub-section, we will first identify two major defining aspects of household headship, and then will discuss, in the next sub-section, various operational definitions of household headship typically found in the literature. In the following sub-

section, we will then identify alternative analytical purposes of using the concept of household headship and discuss appropriate definitions of headship concept for each of such different analytical uses of household headship.

Except for the 'self-reported' headship definition (which has no clear *a priori* definition), alternative operational definitions of the household headship typically include one or both of the two distinct dimensions of household characteristics; demographic composition and (relative) income/economic contribution to the household resources.²⁾

In terms of the household demographics, a major distinction could be made among the households where: "both adult male and adult female are currently present," "only adult female but not adult male is currently present," and "only adult male but not adult female is currently present."³⁾ Among the "only adult female currently present" category, a further distinction can be made between those households where the female 'head' has a steady male partner (legal husband or common union partner) but he is temporarily absent due to temporary labor migration or other mainly occupational reasons (such as military, seaman, and track driver), and those households where the female 'head' is either single (never married), divorced/separated or widowed. Secondly, additional categorization could potentially be made in terms of the presence of children (with or without children), which in turn could be further disaggregated according to age categories (e.g., with small children, older children, etc.).

In terms of economic contribution to the household, a major distinction could be made among the households where: adult male being the main economic contributor, adult female being the main economic contributor, and both adult male and adult female being the economic contributors. Therefore, with four categories in demographic and three in economic contribution dimensions there are, at least conceptually, twelve distinct types of households, as shown in Figure 1.

As is often pointed out, it is clear that the concept of the 'female headship' is asymmetric, in the sense that while the female headship means either female alone being the main economic supporter (economic definition: Cases B, E, H and K) or the absence of an

		<i>Demographic</i>			
		adult male and adult female Present	only adult female currently present		only adult male currently present
			male partner temporarily absent ¹⁾	no male partner ²⁾	
<i>economic contribution</i>	male main (sole) contributor	A	D	G	J
	female main (sole) contributor	B	E	H	K
	both male and female contribute	C	F	I	L

Figure 1. Alternative Definitions of Household Headship

¹⁾. This category includes households where the female 'head' has a steady partner (legal husband or common union partner) who are temporarily absent due to temporary labor migration or other mainly occupational reasons (military, seaman, track driver, etc.).

²⁾. This category includes female 'head' who is single (never married), divorced/separated, or widowed.

adult male partner (demographic definition: Cases D, E, F, G, H and I) non-female headship could include either both male and female main economic supporter (economic definition: cases C and L) or both male and female adults present (demographic definition: cases A and C). In this framework, the potential candidates for the 'FHHs' can be thought of as the gray-shaded boxes in Figure 1, i.e., Cases B, D, E, F, G, H, I, and K.

2. Alternative operational definitions of female household headship

Based on this two dimensional conceptualization of household headship as summarized in Figure 1, we can now discuss alternative operational definitions of household headship often found in the literature.⁴⁾ We start with the most common one, i.e., the self-reported headship, then move on to demographic definitions and then to economic ones.

Self-reported headship: Usually there is no clear definition of the 'household head' in assigning headship typically found in household surveys or in censuses; headship is assigned by each respondent when the household roster is filled in. However, some empirical regularity can be observed. Generally, "what surveys identify as female-headed households are households where no husband or adult male is present." [24] Ac-

cording to Rosenhouse [26], the self-reported head is often "the oldest person, usually male," and tends to be the chief asset owner (such as land or house) and women "usually become chief asset owners after their spouse's death." Furthermore, Rosenhouse [26], who advocates economic definitions of headship (see below), notes that "the current definition of head of households excludes a significant portion of households primarily or substantially maintained by women" (i.e., categories B and K in Figure 1) but "may overstate the number of household headed by women by classifying non-working older women supported by sons, daughters, or other relatives as a heads" (i.e., G). She also finds in the Peru Living Standard Measurement Study that 95% of self-reported FHHs were headed by women who is either single, divorced, separated or widowed (i.e., G, H and I). Although there is no clear *a priori* definition, therefore, generally self-reported headship tends to be close to the demographic definition than the economic.

Purely demographic definition: Often census data have been used to examine trends of increasing or decreasing proportion of FHHs in the general population. Such analysis typically uses purely demographic definition of household headship; "potential FHHs" is defined as the households without an adult male partner (i.e., Cases G, H and I). As Rosenhouse [26] notes, this

definition is roughly reciprocal to self-reported male headship as defined by the presence of an adult male (i.e., A, B, C, D, E, F, J, K and L).

De facto and de jure FHHs: Because of the potential heterogeneity among the self-reported FHHs, one common practice is to distinguish *de facto* and *de jure* FHHs. *De facto* FHHs are those where the self-declared male head is absent for a large proportion, usually at least half, of time (Cases D, E and F). *De jure* FHHs are those where the self-reported female head does not have any legal or common union male partner (Cases G, H, and I). Often *de facto* FHHs may be supported by the male partners who are labor migrant but still play a role in basic decision making and in income contribution (Cases D and F). On the other hand, *de jure* FHHs are headed by widows, by unmarried women, or by those who are divorced or separated. [24]

Economic definitions: A main reason why FHHs are claimed to be worthy of special policy attention is that such households are at greater economic disadvantage due to the "triple burden;" (1) the 'head' often being the single earner (rather than being one of the joint earners), (2) the earner being female thus with various disadvantages in the labor market and in other productive activities (such as access to credit), and (3) the time pressure (thus a potential constraint on labor supply) on the female head because of the 'head' being the main earner and, at the same time, being responsible for maintaining the household, including household chores and child care [26]. This view has led to the dissatisfaction with the demographic definitions of female headship which does not take into account aspects of household economic support, and to the proposals of alternative economic definitions of headship: Cases B, E, H and K as the FHHs. There are alternative headship measures proposed depending on the alternative ways of measuring the economic contribution to the household. One approach is to use measures of incomes earned by individual members, to the extent data are available. One such definition is the "cash head" where the household head is defined as the largest cash income earner. Rogers [25] employs two alternative economic definitions of female headship: "Major earner" definition where the female household head contributes 50% or

more of household *earnings* (i.e., wage income) and "Major income contributor" definition where the female head contributes, through her earnings, 50% or more of total household income from *all sources* (including non-wage income). An alternative approach is to measure the contribution to household maintenance by the hours of labor time devoted by individual members. For example, Rosenhouse [26] proposes "working head" definition where the household head is defined as the largest contributor in terms of spending longest hours in labor market and family labor (but excluding reproductive activities). In practice, the use of such alternative economic definitions will be largely constrained by the available data. When such data on individual earnings or individual incomes are not available, such as in censuses, one potential way of applying the notion of economic contribution in headship definition may be to use education level as a proxy measure for economic contribution.

III. Alternative Research Foci of Female Headship Analysis and Appropriate Definitions

In this section, we will identify a few distinct purposes of using the concept of female household headship often found in policy discussions.⁹⁾ We will also discuss what definitions make most sense for each of such alternative purposes of female headship analysis.

FHHs as an Identifying Criterion for Targeted Policy Interventions for the Poor

If FHHs are represented with a disproportionately large share among the poor, the notion of FHHs could become an identifier of a group of poor households used for targeted policy interventions (such as public investment with geographical targeting, targeted transfer, etc.). A number of studies have been conducted trying to verify the notion of FHHs being over-represented among the poor population. This issue is among the most commonly found theme in the discussion of the FHHs in developing countries.

In analyzing the poverty of FHHs, it is crucial to recognize the potentially large heterogeneity among the self-reported FHHs, as we will discuss below. The notion of 'triple disadvantage' of FHHs indicates that the possible sources of poverty of FHHs are combination

of both economic and demographic aspects of headship definition discussed above. Thus, theoretically the most suitable definition of the female headship, for the purpose of identifying one of the most vulnerable groups of households, could be those households where a woman is the main economic supporter of the household and she does not have a steady partner, such as husband or common law partner: the area H in Figure 1. Nevertheless, the question of whether FHHs are more likely to be in poverty than non-FHHs is an empirical one. In order for the female headship to be justifiably used as a targeting criterion in poverty focused interventions, we would need an empirical basis to show that such households are indeed over-represented among the poor. As we will discuss below, empirical evidence that exists so far regarding the poverty of FHHs is quite mixed; it does not appear to suggest any clear regularity as to whether self-reported female headship or economic or demographic definitions of female headship are more strongly associated with poverty of FHHs.

With such a state of our knowledge, it appears not possible to determine *a priori* the suitable definition of FHHs for the purpose of the analysis of poverty of FHHs that fits a variety of country and regional contexts. Thus a practical approach would be to apply alternative definitions of female headship in examining whether FHHs are disproportionately represented among the poor with each definition.

Recognizing Economic Contribution of Women to Household Support: Household Head as the Main Contributor of the Household Economic Support

Apart from the poverty of FHHs, another issue of potential interest might be the question of who is the main supporter or maintainer in economic sense of the household, and of who contributes more or less to the economic resources within the household. Main purposes here are to describe the relative 'burden' of household support and maintenance born by various household members, and, in particular, to recognize (often neglected) economic contributions that women make in maintaining the household. For example, Sen [27] emphasizes the significance of recognizing the economic contributions of women, as opposed to the typically 'perceived' contribution of women which is

often biased against women influenced by such factors as traditional notions of legitimacy, in a broader context of intrahousehold resource allocation. The flip side of the 'burden' of household support is the relative amount of 'leisure' time spent by various household members, i.e., "time poverty." For example, recent studies have found that female heads are more likely to be primary workers than male heads. [26]

For the recognition of economic contributions of household members, the suitable definition of household headship is obviously the economic definition of the household head, regardless of the self-reported headship or of demographic composition. As we saw in Figure 1, the 'economic' FHHs include areas B, E, H and K. While it is rather straightforward to define the 'economic' headship conceptually, actual measurement of such concept is quite complicated and empirical studies are likely to be constrained by data availability. For example, capturing the income contribution from all sources at the individual-level would be extremely difficult. A large portion of household income often comes from family farm or from non-farm household enterprise activities and in such cases calculating net income at the household aggregate level is complicated enough, and some would claim it impossible. Assigning such income to individual members would be even more so.⁶⁾ As a consequence, the economic definitions of headship based on individual income information that have been proposed in the literature capture only a part of total income contributions, such as cash income or labor market earnings, which are relatively easier to capture; these measures are then used as proxies for the total economic contributions of each member.

As we saw above, an alternative to the income based measures of economic contributions is the 'working head' definition of the headship. Information on hours of productive labor spent by individual household members as hired labor, as family labor or as self-employed activities is often readily available in many multi-purpose household surveys. Rosenhouse [26]'s definition of working head uses such information. However, information on hours spent on re-productive activities, such as household chores, child care, and caring the elderly or the sick, is not usually available in standard household surveys. As has been pointed out,

however, one of the major potential sources of the disadvantages of FHHs is the 'double day burden' of both productive and re-productive work to be performed by the female head in absence of her male partner, and data are often missing on one portion of the 'burden.' Thus it is often difficult to document the 'time poverty' (the relative lack of leisure time) of the female head because of the paucity of data.

An Indirect Tool of the Analysis of Household Behavior: Household head as a person of decision making authority in household resource allocation

Women and men may have systematically different preferences and priorities regarding household resource allocation. When a household makes a purchasing decision of consumption goods, for example, the difference in the relative degree of decision making (or 'bargaining') power between the husband and the wife in the household could lead to differential consumption patterns.⁷⁾ If household headship is defined in terms of the gender of the household member who has the most decision making authority within a certain sphere of resource allocation decisions in the household,⁸⁾ we might potentially be able to interpret differential consumption patterns as a result of differential preferences between women and men. A policy implication of this kind of inquiry is that if the expenditure patterns of men and women are indeed systematically different it may have implications as to, say, who a targeted transfer program should be directed to. Typically, the measures of economic contribution have been used as proxy measures for the control of economic resources in the household, and, furthermore, as proxy measures for the decision making power. However, the notion of control over economic resources, on the one hand, and that of decision making power, on the other, are separate concepts; they do not necessarily have to coincide one another because decision making authority could come from sources other than economic contribution to the household (e.g., age and other non-economic sources of authority in cultural contexts).

Although there is an accumulated empirical literature using the comparison of FHHs and non-FHHs as an indirect tool of inferring the differential preferences of women and men such approach could have some potential methodological problems. If female headship

cannot be seen as exogenous (see below for more on this), then the observed consumption behavior may be the results of factors other than the systematic female-male preference differential. With that recognition, to the extent that the data on FHHs can be used for such a purpose, appropriate definitions could be the demographic one: areas G, H and I in Figure 1. A key reason for inferring the differential resource allocation patterns between FHHs and non-FHHs as an indication of female-male preference differentials is that the presumed absence of adult male would allow the female head to allocate household resources according to her own preferences. On the other hand, resource allocation outcomes in non-FHHs at least reflects men's 'interference,' if not necessarily reflecting men's preferences alone. Thus, inclusion of *de facto* FHHs (D, E, and F in Figure 1) in the FHH definition in this case would likely contaminate the comparison since the absent partners in such households could potentially exercise some degree of decision making authority and 'interfere' with household resource allocations. Similarly, the *purely* economic definition (B, E, H, and K in Figure 1) would not likely be appropriate since with the presence of male partner (in areas B, E and K in Figure 1), even when the female head is the main economic contributor of the household, male preferences could still 'interfere' in the resource allocation decisions within the household. Furthermore, the pure demographic definition of FHH could also contain potential problems. Even if the female head does not have any male partner (areas G, H and I in Figure 1), if such a household is supported by a man residing outside the household (areas G and I in Figure 1), such as her father, brother or other relative, resource allocation outcomes of such households may well reflect, at least partially, his preferences as well. That means that only in the intersection of both economic and demographic definitions (area H in Figure 1) of FHHs are the resource allocation outcomes likely to be the reflection of 'female' preferences alone. Even then, however, given the ambiguity of the household boundary and possible inter-household ties especially prevalent in some developing countries, there may be reasons to be skeptical about this kind of comparisons between different types of households.

In stead of using the comparison of FHHs and non-

FHHs, a more direct way of inferring the potential systematic differences in preferences between female and male is to analyze the correlation between the household resource allocation outcomes and the proxy measures of relative decision making power between women and men within the household. A major challenge here is to find credible proxy measures for such 'decision making power.' Usually in empirical literature, various measures of the degree of control of economic resources are used. The measures of the control of economic resources, in turn, are often proxied by total incomes brought in by husband and wife, non-earned incomes by husband and wife, and asset holding by husband and wife. (see for example, [2], [28], [29]) While this approach is generally a more systematic one than the comparison of FHHs and non-FHHs, it still entails methodological problems of its own. Most notably, many measures of household resource control (or even some instruments used for controlling the endogeneity of the primary proxy variables) are potentially endogenous and therefore the observed differences thus found may not necessarily reflect the differences in preferences between female and male.⁹

Recognizing the Effects of Absence of Fathers on Child Welfare and Development

Since, in many cases, children in FHHs likely lack access to economic and other support of their fathers, analysis of the FHHs may be useful in assessing the effects of the absence of fathers on the welfare of children. The effects of economic, cultural and social aspects of the home environment surrounding children on their welfare and their long-term developmental implications are of considerable importance. In developed country contexts, a large literature exists on the importance of mothers' and father's economic and emotional commitment to their children for the development of their future 'success' and on the possible disadvantages of children who do not co-reside with both parents. (See [3] and the references therein for such literature.) Such aspects of FHHs, however, appear to have attracted much less attention in the literature on developing countries in the past. Nevertheless, more recently the recognition of the role of fathers, economic and otherwise, as well as the policies for ensuring children's access to father's resources and

commitment, regardless of the existence or absence of co-residential arrangements between children and their fathers, has been raised as a potentially important issue. (e. g., [4])

The appropriate definitions of headship here would depend on what aspects of the absence of fathers the main focus is. One aspect of fathers' absence is the regular presence of them within the household contributing to emotional development of children. From such a point of view, the demographic definition (areas G, H and I) of FHHs would be appropriate for examining the effects of fathers. On the other hand, another interest in the increasing focus on fathers' role in raising children is the economic support and commitment of fathers, regardless of the presence or absence of co-residential arrangement between children and their fathers. From this point of view, appropriate definition of FHHs would be the absence of such economic commitment of fathers, that is, focusing on areas E and H in Figure 1. For example, the comparison between the households where father is physically absent, possibly by divorce, separation or common union, but economically committed (included in the area G or I in Figure 1) and those where father is similarly absent and has no economic commitment (in area H) may be the focus of such analysis. Somewhat in between these clear cut cases are cases where fathers are physically present (thus possibly emotionally committed?) but not so economically: areas B and K in Figure 1.

VI. Some Stylized Facts on the Poverty of FHHs: recent findings

The poverty of FHHs revisited

A large number of empirical studies have been conducted on the relationship between female headship and poverty in developing countries. In general, as a few recent reviews have concluded (e.g., [6], [14]), female headship is often found to be associated with higher incidence of poverty. For example, Buvinic and Gupta [6] reviewed 61 studies examining the relationship between female headship and poverty; 38 studies found that FHHs were represented with a disproportionately large share among the poor, additional 15 studies found associations between poverty and some types of female headship, and only 8 studies found no

evidence of greater poverty among FHHs. Most of the studies are based on the self-reported headship definitions although a few had further disaggregation such as *de facto/de jure* FHHs. Based on these findings, they argue that "headship should seriously be considered as a potentially useful criterion for targeting antipoverty interventions, especially in developing countries where means testing is not feasible." On the other hand, however, a recently conducted analysis using household survey data sets from 10 developing countries [24] find that while poverty measures among FHHs tend to be higher in the majority of their sample countries (7 out of 10), in a third to a half of them statistically significant, such evidence may not be necessarily robust; in particular, their analysis using stochastic dominance tests reveals that it is only in two countries (rural Ghana and Bangladesh) out of the ten where FHHs have *consistently* higher poverty among the bottom third of population. Their general conclusion thus is that "differences between male- and female-headed households among the very poor are not sufficiently large that one can conclude that one is unambiguously worse- or better-off." [24] In their analysis self-reported headship definition was used for all data sets. While it is difficult to draw any systematic conclusion from these meta-studies with rather different findings,¹⁰⁾ at least the latter study casts some doubts about the robustness of the often claimed association between the *general* female headship and higher poverty.

One of the main reasons behind such seemingly contradicting conclusions appears to be the fact that FHHs constitute a heterogeneous group of households with different types of FHHs with different reasons for becoming female headed. Thus the compositions of different types of FHHs are likely to be different across countries and across different areas within countries. Contributing factors leading to the increase or decrease of such subtypes of FHHs likely are also different across countries. Generally, detailed country studies tend to suggest that the relationships between female headship and poverty could differ significantly depending on the further disaggregation of reported headship by marital status and other demographic characteristics, or on alternative headship definitions. ([10] on India, [20] on Jamaica, [19] on Kenya, [9] on

Ecuador, [1] on Brazil, [13] on Panama, [4] for a review) Dreze and Srinivasan [10], for example, focus on the poverty of widow-headed households, who are found to be more disadvantaged than the more general categories of FHHs. A few studies employed alternative 'economic' definitions of female headship; while Rosenhouse [26] finds that use of her 'working head' definition identifies stronger positive relation between female headship and greater poverty compared to the self-reported headship in Peru, Rogers [25], with an 'economic definition' of headship in terms of earned income, as well as Handa [17] with the 'working headship' definition, arrives at an opposite conclusion in Dominican Republic. Furthermore, as Buvinic and Gupta's review [6] also points out, even within the same subtype of FHHs the likelihood of such households being poor differs depending on specific country situations. For example, they cite contrasting examples of *de facto* FHHs as results of labor migration of male partners; in some areas, such as rural Botswana, where returns from agriculture are uncertain, *de facto* FHHs are among the poorest while in other regions, such as some parts of Kenya, India and Malawi, *de facto* FHHs have access to profitable agricultural production and thus are rather well off. Also as Fuwa [13] found in Panama, there is also heterogeneity among FHHs across different areas within a country, such as between urban and rural areas.

In addition to the large heterogeneity among FHHs, there are also methodological issues involved in the analysis of household expenditure data that could affect the conclusions drawn regarding the association between female headship and poverty. One of such issues is the adjustment of per-capita consumption expenditure measures with adult-equivalent scales and economies of scale. Such adjustments could potentially lead to significantly different policy implications when, as is often the case, there are systematic correlations between female headship, on the one hand, and household composition and household size, on the other. Also of potential importance is the sensitivity of the female headship-poverty relationship with respect to alternative poverty measures and poverty lines. For example, Dreze and Srinivasan [10] in India, Fuwa [13] in Panama, and Bhushan and Chao in Ghana [5], find that ignoring economies of scale would underestimate the

Table 1. Recent Studies on the Poverty of Female Headed Households: dimensions of FHH heterogeneity and sensitivity analysis

Author (s) and country	Alternative headship definitions				Alternative poverty measures	Alternative poverty lines	Sensitivity to alternative household expenditure adjustment		Regional disaggregation	Non-income dimensions of poverty	Main conclusion*
	disaggregation by marital status	Disaggregation by children, extended family	disaggregation by other demographics	economic definition of headship			adult equivalent scale	economies of scale			
Quisumbing, <i>et al.</i> (10LDCs)	No	No	No	No	P 0 ~ P 2	SD**	Yes	No	No	No	A (but very weak)
Dreze and Srinivasan: (India)	Yes	Extended family	widowhood	No	P 0 ~ P 2	Yes	Yes	Yes	No	No	B (widow)
Rosenhouse: (Peru)	No	No	Yes (hh. composition)	Yes (working head)	No	No	No ?	No	Yes (urban /rural)	Yes	A (economic FHHs poorer)
Lauat, <i>et al.</i> : (Jamaica)	Yes	No	No	No	P 0 ~ P 2	Yes	Yes	No	Yes (urban /rural)	Yes	A (but very weak)
Rogers (Dominican Republic)	No	No ?	Yes no adult male	Yes (earning)	No	No	No	No	No	Yes	C (economic FHHs better-off)
Bhushan and Chao: (Ghana)	No	No	No	No	No	No	Yes	Yes	No	Yes	A (with scale economies) C (otherwise)
Handa (Jamaica)	No	No	No	Yes	No	No	No	No	Yes	Yes	C
Fuwa (Panama)	Yes	No	Yes (no adult male)	Yes (working head)	P 0 ~ P 2	SD**	Yes	Yes	Yes (urban /rural)	Yes	B (urban, with unmarried partner)

*Typology of main conclusions: Type A: FHHs are generally found to be poorer than non-FHHs.

Type B: FHHs are not generally poorer but some specific sub-categories of FHHs are found to be poorer.

Type C: Little or no evidence of FHHs being poorer than non-FHHs.

**SD: stochastic dominance test.

poverty of FHHs enough to lead to 'rank reversals' while ignoring adult equivalent scales has relatively small quantitative effects. Louat *et al.* [20], on the other hand, find relatively large effects of adult equivalence adjustments as well as of using alternative poverty measures. Quisumbing *et al.* [24] find that whether or not FHHs are over-represented among the poor somewhat depends on the level of the poverty line, while Dreze and Srinivasan [10]'s results were found to be robust across a wide range of poverty lines. Table 1 summarizes recent studies that include alternative definitions or disaggregation of FHHs or sensitivity analysis with respect to measurement methodologies (adult equivalence scales, economies of scale, poverty measures, poverty lines, etc.).

Despite the conclusions drawn by some observers such as in Buvinic and Gupta [6], many (though with some exceptions, as noted above) past studies on the relationship between female headship and poverty were likely to be clouded by many factors, including the ambiguity in the definition of the headship concept

in data, lack of disaggregation among very different types of female headship situations and among potentially different regional contexts within countries, and possible sensitivity of findings to alternative adjustment methods in incorporating household demographics into household expenditure (or income) measures. In order to obtain policy implications, such as the attractiveness of the female headship as a criterion for targeted anti-poverty interventions, we need to understand systematic relationships between different types of FHHs and poverty under different circumstances, which in turn will require more systematic analyses than generally conducted in the past, incorporating all of these factors mentioned above for each countries.¹¹⁾

Our discussion in this section on the relationship between female headship and poverty has so far focused mostly on studies of poverty as measured by household expenditure or income. As pointed out by many, there are many non-income dimensions of poverty that need to be examined in order to obtain a fuller picture of the poverty of FHHs. While there are many

important aspects of non-income poverty dimensions, the issues that have drawn particularly high attention are the 'time poverty' aspects of FHHs and intergenerational transmission of disadvantages of FHHs, mainly through the nutritional status and education of children. Because of the 'double day burden' of FHH, it is often argued, female heads are more likely to be 'time poor' (that is, consume smaller amount of leisure time), than female or male heads of jointly-headed households. Studies based on a few (though often incomplete) data sets do seem to suggest that female heads of households tend to consume smaller amount of leisure. (e.g., [5], [20], and [26]. But also see Handa [15] for a counter-example.) Furthermore, Buvinic and Gupta [6] argue that such "substitution of work for leisure to achieve a certain level of consumption in female-headed households may signify the perpetuation of poverty into the next generation," leading to the second issue raised here.

The issue of the possibility of intergenerational transmission of disadvantages in FHHs is more complicated. As have been often pointed out, there are at least two counteracting forces in operation here. On one hand, if FHHs indeed tend to be poorer than non-FHHs in terms of both consumption and leisure, then it implies that they tend to have less economic resources available within FHHs than in non-FHHs and thus their children's welfare tends to be lower, through lower consumption (including food consumption which could have a long-term effects), lower education expenditures, and so on. Furthermore, the 'double day' burden on the female heads of economic support and household chores could potentially place burden on children's time by forcing them to supplement their mothers' work, thus leading to possibly less education investment. On the other hand, however, children within FHHs could be better-off than their counterpart in non-FHHs with the same level of income, because of possibly systematic differences in the patterns of household resource allocation as a result of differential preferences between women and men. This latter force is at the core of the interest in the intrahousehold resource allocation behavior, as discussed above. Which of these counteracting forces tends to dominate is an empirical question. It is not surprising, therefore, that we can find mixed results from empiri-

cal studies regarding the positive or negative association between female headship and the welfare of children. For example, Buvinic and Gupta [6]'s review finds that among the 29 studies they covered there was "a *slight* bias toward finding more protective effects in Africa, but recent studies report this phenomenon also in Latin America and the Caribbean" (italic added) when the poverty outcomes are measured by nutritional status and educational outcomes of children.

Limits of static headship analysis

As we have seen, the problems with using the self-reported definition of headship for various analytical purposes have been well-recognized in the recent literature, and alternative definitions of headship for different analytical purposes have been proposed. Even when alternative definitions of headship are used for different analytical issues, however, there are potential problems in the common approach of using a given definition of headship and examining the association between female headship and various household or intra-household outcomes using cross-sectional survey data. For example, some of otherwise similar families of a mother and children may form a FHH or may alternatively live with the mother's father, for example, thus appearing as a portion of a male headed household in survey data. Therefore, a simple comparison of FHHs and non-FHHs based on such data could fail to identify the latter group of female maintained families. Furthermore, in comparisons of FHHs and non-FHHs a usual (if implicit) assumption is that the defined headship and the household boundary are taken as exogenously given with respect to those outcomes of interest.¹²⁾ However, while some of the reasons for becoming a female head may be caused by exogenous events, such as the death of the spouse leading to widowhood, other cases are often results of marriage, entering a common-union, household merger, and household split; these are choices made by household members. Even in the case of an widow, in some cases, she may have the potential option of becoming a part of a male headed (by her father, her brother, her son, or a new male partner) household. Then, it may be that the systematic differences that are observed between FHHs and non-FHHs, such as in poverty or in patterns of intrahousehold resource allocation outcomes,

are not so much the results of female headship per se as the results of other factors that cause both female headship and such differential outcomes.

All these potential concerns about female headship analysis point to the limits of the rather static nature of typical headship analyses. Such limitations are not necessarily confined to the female headship literature, but rather shared by the majority of the analysis of household behavior with a given definition of the household. In any case, in order to analyze the observed differential outcomes between female and male headed households, such as in welfare level and poverty, in the effects on human development of children and in the inter-generational transmission of poverty, and to identify the effects of female headship on such outcomes, it may be necessary to treat the headship as endogenous rather than as exogenously given. Such approach then would involve modeling the formation and dissolution of the household and the change in household composition. While there has been a large literature on the determinants of female headship in the US, with the main policy focus being the effects of welfare programs on the formation of FHHs, including Danzinger *et al.* [8] and Moffitt [22], there have been relatively few such attempts in developing country contexts. One exception, however, is the study by Handa [16] using the Jamaican Living Standard Measurement Study data. Their approach typically models women's choice behavior of becoming either a household head or a wife, as a function of her expected income or consumption level and of leisure in the alternative headship states.¹³⁾ These studies generally suggest that female headship and poverty of the household members are jointly determined, rather than the more familiar view of female headship causing poverty. Similarly, attempts to identify the effects of female headship on the welfare of children may be complicated by the systematic patterns of child fostering observed in some areas; for example, a recent study, using data from Sub-Saharan Africa, Thailand and Dominican Republic, finds that a child is more likely to be fostered away from its mother when the mother has no residential spouse or partner and when there is competition among siblings.¹⁴⁾ A fuller understanding of the female headship, therefore, would require analyzing differential processes of women under different cir-

cumstances becoming different types of FHHs. This inquiry, in turn, would lead to data requirements that go beyond information typically available in standard household surveys. One possible approach to the analysis of endogenous household headship would be to use panel data that covers a long enough period where changes in the headship are observed for the same set of households.

V. Conclusions

In this paper we attempted to clarify some of the issues involved in the analysis of FHHs in developing country contexts. Such issues include different aspects of household characteristics that can be used to define household headship, alternative research objectives of using household headship concepts, and appropriate headship definitions suitable for different research foci. We then examined recent empirical literature with a focus on the relationships between female headship and higher incidence of poverty. We argued that, despite the recent accumulation of empirical findings on this issue, we may be able to regard these results neither conclusive nor robust; some of them are likely clouded due to the heterogeneity among self-reported FHHs and methodological issues involved in poverty comparisons, such as adjustments of per-capita consumption. Therefore, in order to obtain more conclusive results on the poverty of FHHs, we would probably need more comprehensive sensitivity analyses than typically conducted in many past studies. Finally, however, even with such further refinements in the analysis, we would also need to recognize the limitations of the static headship analysis in general.

Notes

- 1) On the issues of intrahousehold analysis and data requirements, see, for example, [12] and [23].
- 2) While there are other dimensions, such as age, that are potentially relevant in defining headship, for the present purpose, we will focus on these two dimensions.
- 3) For the sake of simplicity (a great deal of simplification indeed), this classification presumes mainly nuclear family type cases where there is one gen-

eration of working adults who provide a large proportion of economic support. The distinction is made in reference to such working adults.

- 4) Additional definitions and disaggregation of headship can be found in [7].
- 5) Of course, this does not exhaust issues regarding FHHs. For a broader discussion covering non-economic literature, see, for example, Chant [7].
- 6) If reliable estimates of household-level incomes from such activities could be obtained by some fashion (which is rarely the case, if ever), and if information on the labor hours contributed by household members are available (which is often the case in many multi-purpose household surveys), one way to impute the individual income contribution might be to use the relative share of labor hour contributions to each business or farm activity in dividing the household-level income.
- 7) While the majority of both theoretical and empirical literature appears to focus on the relative decision making power between the husband and the wife a similar question could be asked among different sets of people within the households, such as between parents and children, among siblings, and so on.
- 8) Here we are focusing on economic sphere of household decision making such as choice of consumption goods. Obviously there are many non-economic spheres, such as naming a new born child, choice (or approval) of the marriage partners of children, and so on. The person of decision making authority in such non-economic decision making may well differ from the one in the economic sphere. Furthermore, even within the economic sphere distribution of decision making 'power' could differ depending on the kind of economic resources to focus on, such as between daily consumption items versus major investment goods.
- 9) In response to such skepticism, a recent study by Lundberg *et al.* [21] used an interesting but rarely available case study of UK child support payment policy in inferring differential consumption allocation patterns between women and men. For a more detailed discussion of this literature, see, for example, Hoddinott *et al* [18].
- 10) For example, while the number of *countries*

(rather than the number of *studies*) covered in Buvinic and Gupta [6]'s review is not clear, among the 12 countries specifically mentioned in their main texts of the paper, only two were included in Quisumbing, *et al.* [24]'s analysis. So one possible source of differing conclusions might be the difference in the country coverage.

- 11) Fuwa [13] is intended as such an attempt.
- 12) In fact, this limitation has also been noted by many of the recent authors, such as Rogers [25], Quisumbing *et al.* [24] and Bruce and Lloyd [4] to name only a few.
- 13) Although not directly focusing on headship decision, a related literature on household formation has recently emerged. For example, Foster [11], using longitudinal data from Bangladesh, analyzed the patterns of household formation and partition.
- 14) As cited by Bruce and Lloyd [4].

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発展途上国における女性を世帯主とする家計の分析に関する一考察

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摘 要

本論文では、途上国における女性を世帯主とする家計の実証分析に当たってのいくつかの問題点を整理し、特に、女性を世帯主とする家計と貧困との関係に関する最近の実証研究結果のレビューを行う。ここで考察の対象

として取り上げる実証分析上の問題としては、女性世帯主家計分析と最近特に注目を集めている貧困のジェンダー分析との関係、「世帯主」概念の多様性、女性世帯主家計の分析をめぐるいくつかの異なった問題関心とそれぞれの問題関心に見合った「世帯主」概念の採用の必要性、等である。